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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,450	09/15/2003	Merja E. Penttila	GC590-2-C1	2737
<div>7590 11/01/2007</div> <div>Genencor International, Inc. 925 Page Mill Road Pola Alto, CA 94034-1013</div>				
			<div>EXAMINER</div> <div>GUZO, DAVID</div>	
			<div>ART UNIT</div> <div>1636</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>11/01/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/663,450

Applicant(s)

PENTTILA ET AL.

Examiner

David Guzo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-13,26-34,83-85,87 and 89-98 is/are pending in the application.
- 4a) Of the above claim(s) 83-85 and 87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-13,26-34 and 89-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Detailed Action

Withdrawn Claims

Claims 83-85, 87 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/17/05.

35 USC 112, 1st Paragraph Rejections

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-3, 5-13, 26-34, 89-98 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection (NEW MATTER) is maintained for reasons of record in the previous Office Action (mailed 4/20/07) and for reasons outlined below.

Applicants traverse this rejection by reiterating their previous remarks and asserting that direct support for the claim language (in claims 2, 89-90 and 95-97) is found on page 6 through page 7 of the specification. With regard to claims 26-27, applicants have amended the claims as suggested by the examiner. Applicants have

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canceled claim 36. With regard to claim 95, applicants removed the reference to "combinations" of the proteins.

Applicant's arguments filed 8/15/07 have been fully considered but they are not persuasive. Initially, it is noted that applicants' amendment of claims 2, 27 and 29 reciting a method of increasing the secretion of a heterologous protein in a **fungal cell** represents impermissible new matter. The application as filed (paragraph [0092] from the PG publication) discloses the following with regard to the cells in which secretion of heterologous proteins are increased:

The cell in which the proteins are secreted is any cell having an upregulated protein response. Preferably, the host to be transformed with the genes of the invention can be any eukaryotic cell suitable for foreign or endogenous protein production, e.g., any *S. cerevisiae* yeast strain, (e.g., DBY746, BMA64-1A, AH22, S150-2B, GYPY55-15bA, vtt-a-63015) any *Trichoderma* spp. such as *T. longibrachiatum* and the *T. reesei* strains derived from the natural isolate QM6a, such as RUTC-30, RL-P37, QM9416 and VIT-D-79125, any *Kluyveromyces* spp./ *Sch. pombe*, *H. polymorpha*, *Pichia*, *Aspergillus*, *Neurospora*, *Yarrowia*, *Fusarium*, *Penicilium* spp. or higher eukaryotic cells.

Limitation of the cells to **any fungal cell** is not supported by the application, as originally filed.

Likewise, the limitation of nucleic acids encoding a **fungal HAC1 UPR-modulating protein** comprising a DNA binding domain having at least 90% sequence identity to a DNA binding protein of:

- a) amino acid residues 84 - 147 of SEQ ID NO: 5;
- b) amino acid residues 53- 116 of SEQ ID NO: 6 or
- c) amino acid residues 45 -109 of SEQ ID No:19

is not supported by the application as filed because said application does not recite the limitation of **any fungal HAC1 UPR-modulating protein** comprising a DNA binding domain having at least 90% sequence identity to the recited SEQ ID NOs.

With regard to applicants' assertion that direct support can be found on pages 6-7 for the specific amino acid residues recited in claim 2, said assertion is valid and that part of the written description rejection is withdrawn.

No Claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Guzo, Ph.D., whose telephone number is (571)

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272-0767. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach, can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Guzo
October 25, 2007


DAVID GUZO
PRIMARY EXAMINER